

# **Method For Determining Failure Rate And Selecting Best Burn-In Time**

## **ABSTRACT OF THE INVENTION**

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Method for determining failure rate and selecting a best burn-in time, comprising: provide numerous integrate circuits; performs a life-time testing process, wherein a failure rate testing time relation is established by measuring the life-time of each integrated circuit under a testing environment, wherein an acceleration factor function also is established under the testing environment, the acceleration factor function is related to the relationship between a testing time of the testing environment and a real time of a normal operating environment; performs a simulating process that a testing time function is used to simulate the failure rate testing time relation; performs a transforming process by using the acceleration factor function to transform the testing time function into a real time function, wherein a knee point of the real time function corresponds to an operation time which is the best burn-in time; and performs an integrating process to integrate the real time function through a calculating region to consult an accumulated failure rate real time function, wherein the calculating region is a region in which the real time is larger than the best burn-in time. Further, while more than one integrated circuits are failed before the knee point, the method further comprising deleting part of testing records and re-calculating the best burn-in time until only one integrated circuit is fail before the knee point.

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